

OCT 4 - 2005

K 051514

**510(k) Summary**

1. SUBMITTED BY: Bruce A. MacFarlane, Ph.D.  
Hypoguard USA, Inc.  
5182 West 76<sup>th</sup> Street  
Minneapolis, MN 55439  
USA  
Phone: 952-646-3188

Summary prepared: 6 June 2005

2. NAME OF DEVICES:

Trade Names: Assure<sup>®</sup> Pro Blood Glucose Monitoring System  
Assure<sup>®</sup> Pro Blood Glucose Meter  
Assure<sup>®</sup> Pro Test Strips  
Assure<sup>®</sup> Pro Level 1 Control Solution  
Assure<sup>®</sup> Pro Level 2 Control Solution

Common Names/Descriptions: Blood glucose monitoring system

Classification Names: - Glucose test system, product codes CGA & NBW,  
21 CFR 862.1345  
- Single (specified) analyte controls  
(assayed/unassayed), product code JJX, 21  
CFR 862.1660

Regulatory Status: Class II

PREDICATE DEVICE: Advance Micro-draw<sup>™</sup> Blood Glucose Monitoring  
System

3. DEVICE DESCRIPTION:

The Assure<sup>®</sup> Pro Blood Glucose Monitoring System consists of a meter, test strips, and control solution. It is intended for over-the-counter, home use by persons with diabetes to monitor their blood glucose levels, or for use in a clinical setting by health care professionals. The system tests fresh capillary whole blood. The meter is a portable, battery-operated instrument designed for use with Assure<sup>®</sup> Pro Test Strips.

## **510(k) Summary (cont'd)**

Hypoguard USA, Inc.

### **4. INTENDED USE:**

The Assure® Pro Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood. Testing is done outside the body (In Vitro Diagnostic Use). It is indicated for use in clinical settings by healthcare professionals, or at home (over the counter [OTC]) by persons with diabetes, as an aid to monitor the effectiveness of diabetes control.

### **5. SUMMARY OF TECHNOLOGICAL CHARACTERISTICS**

The Assure Pro Blood Glucose Monitoring System shares the same technological characteristics as the predicate except that 1) test strips are inserted in the top of the meter (instead of the bottom), 2) there is a strip-ejection mechanism, and 3) there is a backlight to the display screen.

### **6. NON-CLINICAL TESTING**

Electromagnetic compatibility (EMC) testing was conducted.

### **7. CLINICAL TESTING**

Accuracy/method correlation testing was done comparing results obtained by participants with diabetes against clinician results and reference method results.

Testing included both men and women, both Type 1 and Type 2 diabetes, ages from eighteen to eighty-two. Tested blood glucose values encompassed the 61-383 mg/dL glucose range. Linear regression statistics showed good correlation between participant, clinician and reference results.

### **8. CONCLUSIONS FROM TESTING**

Testing demonstrated that the performance of Assure Pro was substantially equivalent to that of the predicate.



OCT 4 - 2005

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Bruce A. MacFarlane, Ph.D.  
Vice President, Regulatory Affairs and Quality Systems  
Hypoguard USA, Inc.  
5182 West 76<sup>th</sup> Street  
Minneapolis, MN 55439

Re: k051514  
Trade/Device Name: Assure® Pro Blood Glucose Monitoring System  
Regulation Number: 21 CFR 862.1345  
Regulation Name: Glucose test system  
Regulatory Class: Class II  
Product Code: NBW, CGA  
Dated: September 23, 2005  
Received: September 27, 2005

Dear Dr. MacFarlane:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

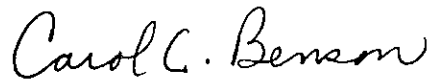
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0484. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink that reads "Carol C. Benson". The signature is written in a cursive, flowing style.

Carol C. Benson, M.A.  
Acting Director  
Division of Chemistry and Toxicology  
Office of *In Vitro* Diagnostic Device  
Evaluation and Safety  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K051514

Device Name: Assure® Pro Blood Glucose Monitoring System

### Indications For Use:

#### Assure® Pro Blood Glucose Monitoring System:

The Assure Pro Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood. Testing is done outside the body (*In Vitro* Diagnostic Use). It is indicated for use at home (over the counter [OTC]) by persons with diabetes, or in clinical settings by healthcare professionals, as an aid to monitor the effectiveness of diabetes control.

#### Assure® Pro Blood Glucose Meter:

The Assure Pro Blood Glucose Meter is intended for the quantitative measurement of glucose in fresh capillary whole blood. Testing is done outside the body (*In Vitro* Diagnostic Use). It is indicated for use at home (over the counter [OTC]) by persons with diabetes, or in clinical settings by healthcare professionals, as an aid to monitor the effectiveness of diabetes control.

#### Assure® Pro Blood Glucose Test Strips:

Assure Pro Test Strips are intended for the quantitative measurement of glucose in fresh capillary whole blood when used with the Assure Pro Blood Glucose Meter. Testing is done outside the body (*In Vitro* Diagnostic Use). It is indicated for use at home (over the counter [OTC]) by persons with diabetes, or in clinical settings by healthcare professionals, as an aid to monitor the effectiveness of diabetes control.

#### Assure® Pro Control Solution:

For use with Assure Pro Blood Glucose Meter and Assure Pro Test Strips as a quality control check to verify the accuracy of blood glucose test results.

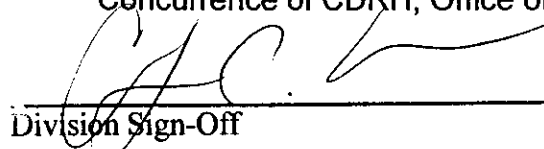
Prescription Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use √  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

  
Division Sign-Off

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Office of In Vitro Diagnostic Device  
Evaluation and Safety

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